



WE DESIGN FOR THE FUTUER

مهندسون استشاريون

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MEDAD

Architects & Consultant Engineers

SPRING EDITION

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ABOUT MEDAD:

Medad is a creative design office providing architectural, urban and interior design along with project management and furniture procurement services for clients across the globe.

We design innovative retail, residential, hospitality, office and integrated mixed-use developments, with a focus on the people who use them. Our office is committed to creating unique and memorable destinations – projects and places that enhance their surroundings and improve the lives of those who populate and move through them daily.

Medad thinks globally but acts locally. We believe design should be timeless and inspiring yet practical for both their owners and occupants. We imagine things from both the outside to the inside and the inside to the outside. Our special expertise is the interlocking of the architecture to the interior design. With creativity and modern thinking we realize projects which stand out and the result is perfectly tailored to the user.

Medad has been part of the architecture community and engineering consulting for 34 years with a rich history of collaborations and ever enriched artistic, technical, and professional capabilities.

Medad also established several entities and sister companies (Egyptian Company for Building Industry "Madina", Arabian Wood industries Co. "Araek", "Madar" Project Management, United Group of Wood Industry "khashab Khan", TORATH for construction and urban development, FNON for the wood industry and finally AlMayan for handmade products), with a continued creative activities and products with a high degree of excellence.

Medad's branches extend to several countries including Saudi Arabia (Riyadh, Jeddah), Qatar (Doha), UAE (Ras Al Khaimah), Libya (Tripoli), and finally Kenya (Nairobi).

Medad senior staff's accumulated experiences are being passed on through an educational process, whether lecturing or arbitration projects in various Egyptian universities such as Cairo University, American University in Cairo, Arab Academy for Science, Technology & Maritime Transport, and Modern Sciences and Art University (MSA).

Abraj Quartier
The Pearl, Qatar
أبراج كارتية
اللؤلؤة، قطر

MEDAD'S COMMUNITY:

The directors and senior staff of Medad bring many years of collective experience to every project – we know what works. At the same time, we capture emerging trends worldwide and incorporate the best new ideas into our designs on a continual basis. Working with many of the world's strongest developers, designers, and retailers, we treat each new opportunity as a collaborative exploration, with the goal of meeting the expectations of our clients with added-value of our clients and our projects' end users.

We believe in investing in a team of strong collaborators and supporters of one another. Our process is an open studio where input and comment is sought and considered from all of members of our team guided by a strong design lead. Nurturing a creative atmosphere and drawing on a diverse and experienced team ensures for effective and timely results.



ABRAJ QUARTIER The Pearl, Qatar أبراج كارتية اللؤلؤة، قطر



www.medadce.com

01

05

Abraj Quartier precinct consists of seven towers, five of which are 36 storeys high, the other two being 42 storeys. These latter two straddle the access road to the mainland and form the gateway to The Pearl-Qatar. Also known as the Avenue of Towers, the Abraj Quartier precinct is a prime location for offices, businesses and companies; in particular the highly prestigious twin towers. Each of these provides panoramic and breathtaking views of the mainland across the azure waters of the Arabian Gulf. The twin towers have a distinct architecture, developed to primarily accommodate high-quality leasable commercial office space spanning 54,693 sqm. Standing 201 meters tall on either side of the main access road, they welcome all visitors who enter The Pearl-Qatar. The project comprises the development of 4 plots with villas, townhouses, podium, 4 towers of 331 no furnished apartments.



06

Medad's Scope of work is project and construction management.

The project costs more than 500 million dollars. It's considered one of the biggest real states buildings in Qatar.

Features:

- 42-36 Floors
- Tallest Buildings on the Island
- Spectacular Views
- All Amenities are available

تتكون منطقة أبراج كارتية من سبعة أبراج ، خمسة منها بارتفاع 36 طابقاً ، والاثنان الآخران بارتفاع 42 طابقاً. يشكل هذان الأخيران بوابة الدخول إلى منطقة اللؤلؤة بالعاصمة القطرية الدوحة. تُعرف منطقة أبراج كارتية أيضاً باسم شارع الأبراج ، وهو موقع رئيسي مميز للمكاتب والشركات ؛ وبصفة خاصة الأبراج التوأم المرموقة للغاية

نطاق عمل مداد هو إدارة المشاريع والإشراف على البناء

تكلفة المشروع أكثر من 500 مليون دولار. ويعتبر من أكبر مباني الدولة في قطر.



JAYD MALL New Cairo, Egypt مركز جايد التجاري



02

The project is located within the scheme (Jayd Compound) and the field of work is concerned with developing an area of 18558 square meters, and the project is a commercial mall with a total built-up area of 13525 and 6241 and a maximum of 3 floors (ground + two floors + rooftop rooms) with a coverage rate not exceeding %30

The project had many challenges, including, for example, achieving the most important goals of commercial activity, which depends on maximizing the exposure and visibility of shops to the public and users, which was done by exploiting the depth of the ground by making 3 areas overlooking the shops to increase the number of shops that have an interface that allows them for users to see With a wide variety of spaces to serve the largest segment of marketing customers.

Providing entrances for administrative activity in the upper floors.

And providing the number of parking lots that serve the project, with the use of a smart mechanical system in the basement to provide the required number.



يقع المشروع ضمن مخطط (المجمع السكني جايد) ويختص مجال العمل بتطوير مساحة 18558 متر مربع ، والمشروع عبارة عن مركز تجاري بمساحة بناء إجمالية 19766 م² وعلى 3 أدوار (أرضي + دورين + غرف علوية) بنسبة تغطية لا تتجاوز 30٪.

واجه المشروع العديد من التحديات منها على سبيل المثال زيادة مساحة تعرض المحلات للمشاهدات وممرات الجمهور وهو ما يعد من أهم الأهداف التي يحتاج إليها أي نشاط تجاري، و هو ما تم عن طريق استغلال عمق الأرض بعمل 3 مناطق وسيطة شبه عامة تطل عليها المحلات لزيادة عدد المحلات التي لها واجهة تتيح أن يراها المستخدمون مع توفير تنوع كبير في المساحات لخدمة أكبر شريحة من العملاء تسويقياً.

و كذلك توفير مداخل خاصة بالنشاط الإداري بالأدوار العليا.

و توفير عدد مواقف السيارات الذي يخدم المشروع مع استخدام نظام ميكانيكي ذكي بالبروم لتوفير العدد المطلوب.



SAWARY COMPOUND VILLAS New Alex, Egypt

مجمع صواري السكني الإسكندرية الجديدة، مصر



03

The new Sawari Alexandria project is located in the heart of Alexandria, on the desert road, extending from Carrefour Alexandria to Carrefour Borg El Arab, at a distance of 6 km from Lake Mariout in the city of Alexandria, next to the Alexandria Corniche, near Hyper Carrefour, and close to the Police Hospital, which is located at the entrance to the city, making The project is in one of the distinctive locations that attract customers who are looking for high-end places in Alexandria.

One of the important objectives of the project is to occupy an area of 60 million square meters in order to transform slums into human areas suitable for building decent urban communities away from overcrowding and traffic congestion. The complex of villas on a land area of 57,17 acres, with a distinct character with different areas to satisfy all high tastes and financial capabilities. Four models of different size and design were designed, taking into account the presence of the elements of greenery and water in an organic design to ensure visual diversity.



يقع مشروع صواري في مدخل مدينة الإسكندرية على الطريق الصحراوي الممتد من كارفور الإسكندرية إلى كارفور برج العرب على بعد 6 كيلومترات من بحيرة مريوط وقريب من مستشفى الشرطة ، مما يجعله في أحد المواقع المميزة التي تجذب العملاء الباحثين عن الرقي. و صمم مجمع الفيلات على أرض بمساحة 57,17 فدان ، ذات طابع مميز بمساحات مختلفة لإرضاء كافة الأذواق العالية والإمكانيات المادية. وتم تصميم أربعة نماذج مختلفة الأحجام والتصميم مع مراعاة وجود عناصر المساحات الخضراء والمياه في تصميم عضوي لضمان التنوع البصري.



THE FOUR SCHOLARS MOSQUE New Cairo, Egypt مسجد الأئمة الأربعة القاهرة الجديدة، مصر

The mosque was built to fulfill the need of integrated services for new settlements in new Cairo. The building is located at the fifth settlement New Cairo and exposed to the surrounding community 360 degree with external plaza for Friday & feast prayers. The form generally is so simple but very functional, giving the maximum length of praying lines, with a woman prayer area in the mezzanine, with sufficient privacy given by screens inspired by the Islamic ornaments, also providing built-in shelves for the (Holy) Quran and shoes lockers using the duality of contemporary architecture, traditional motifs is so obvious and spread all over the mosque, such as the minaret, Skylight, Entrance, Mihrab and openings with some geometrical composition formations. The finishing materials meant to be natural stone in the special elements and the base, while cement is the basic points for the rest of the building, with screens and ornaments of G.R.C. The overall impact of the building is to give a slightly different feeling of spiritual recognition using different approach.



04

تم بناء المسجد لتلبية الحاجة من الخدمات المتكاملة للمجمعات الجديدة في القاهرة الجديدة.

ويقع المبنى في التجمع الخامس القاهرة الجديدة مع ساحة خارجية لصلاة الجمعة وصلاة العيد.

نموذج التصميم في غاية البساطة ولكنه فعال للغاية في استحضار ضوابط الدين الإسلامي ومستحباته مثل إعطاء الحد الأقصى لطول خطوط الصلاة، بالإضافة الى مساحة صلاة للسيدات في الميزانين، مع الخصوصية الكافية التي قدمتها نوافذ مستوطة من الطلي الإسلامية، وأيضا توفير أرفف للمصاحف و خزانات الأضحية باستخدام ازدواجية العمارة المعاصرة، الزخارف التقليدية واضحة جدا وتنتشر في جميع أنحاء المسجد، مثل المئذنة، السقفية، المدخل، المحراب والفتحات مع بعض التشكيلات الهندسية مواد التشطيب من المفترض أن تكون من الحجر الطبيعي في العناصر المميزة والقاعدة، في حين ان الأسمنت هو الطابع الاساسي لبقية المبنى مع بعض البرايز والطلاء من G.R.C.

لمشاهدة رؤية مبادرة عالم من المساجد من جائزة عبداللطيف الفوزان لعمارة المساجد وتحليلها لمسجد الأئمة الأربعة:

<https://www.youtube.com/watch?v=QKwSk8sgyDg>

Porto Golf Residential Complex
Cairo, Egypt
مجمع سكني بورتو جولف
القاهرة، مصر

OUR VALUES:

Collaboration is central to our creative process.

We believe in the power of people working together creatively. We actively engage with clients, consultants and our staff, encouraging open discussion throughout all phases of a project.

We build relationships – care about our clients.

“Our word is our bond” and it is the guiding principle in all of our client relationships. This enables us to add value significantly and to build trust with our clients and partners.

Our designs are based on simple and elegant solutions, with the client in mind.

Our design approach is sensitive to location and culture, often combining the latest thinking with the local Islamic requirements to create truly inspirational spaces.

Grosvenor East Manchester Metropolitan University

The 12,100 sqm new building for the faculty of Arts and Humanities at Manchester Metropolitan University brings together a dynamic mix of the performing arts, journalism, and languages alongside the newly established Manchester Poetry Library, a cafe, and public foyers, exhibition space, and a -180seat studio theatre. Situated on Manchester's Oxford Road corridor, Grosvenor East provides the university with spaces for teaching and learning, and a highly visible new cultural hub connected to the city.



Occupying a tight 2,600 sqm corner site, a sophisticated sectional design interlocks the building's complex program on either side of a central atrium that acts as an internal 'street', linking the north and south sides of the campus. Also essential in the design development was the retention of a listed facade, all that remains of the 1830s Chorlton on Medlock Town Hall once on this site. The formal strength of the portico is exploited as the new building's primary entrance with door openings lengthened for step-free access. This is a key site for Manchester Metropolitan University, both in terms of its high visibility and its location as a cornerstone to the campus around All Saint's Park.

A heavy masonry body of prefabricated glass-reinforced concrete panels, with a lightweight copper-colored metal framework to the windows and upper facade levels, gives the building long-term solidity and permanence with a warm, decorative flourish. The building's massing is broken into a series of individual blocks, visible in the elevations and roof plan, that gradually increase in scale, culminating in the building's highest point on the corner of Oxford Road, facing back towards the city.



University of the Arts Helsinki

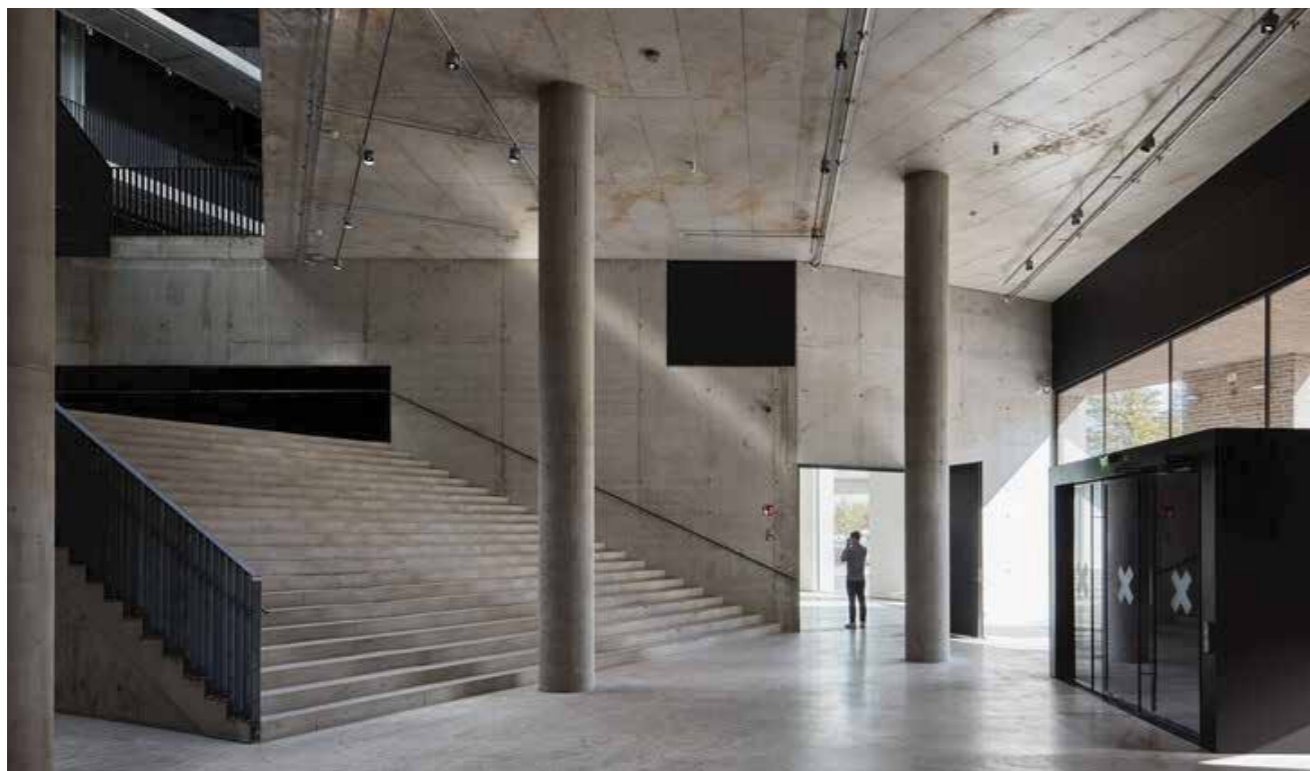


The new building for the University of the Arts (Uniarts) Helsinki, the Academy of fine Arts, provides students and staff with exceptional facilities for tuition and making art within an architecturally distinct building. The architecture celebrates the imaginative integration of existing structures and pays homage to the history of Sörnäinen, a post-industrial neighborhood buzzing today with young urban life. Designed by JKMM, the ingenuity of the architecture lies in offering students of fine arts, lighting, and sound design and design for the performing arts generous, muscular, well-lit, and clearly defined spaces.



Uniarts Helsinki's Academy of fine Arts has been designed as a direct response to the needs of future visionaries providing a generous contemporary maker space with the latest technologies. With its raw surfaces and sense of spatial and experiential adventure, this is a building budding artists can respond to, challenge imaginatively. Together with the Theatre Academy, the Academy of fine Arts is part and parcel of the creative Uniarts campus on a site making fresh use of the eastern seafront of Helsinki's downtown area. The two academies interconnect through an existing Modernist silo building at the heart of the site.

The Theatre Academy – providing facilities for theatre students housed within a former soap factory – has been partially remodeled with JKMM's input. The practice has transformed a neighboring converted electrical work to provide the Academy of fine Arts with additional accommodation directly linked to the new build part of the scheme. In this way, the newly revisited Uniarts buildings introduce a significant and discrete 21st Century layer to the project. The Academy of fine Arts is affectionately named "Mylly" (Finnish for The Mill) referencing the building that preceded it.



Private villa
Diriyah, KSA
فيلا خاصة
الدرعية، السعودية

DESIGN PHASES:

We aim to make the design process enjoyable for our clients, interpreting their ideas and developing a finished product meets their expectations with added-value.

Pre-contract design stages:

- Briefing
- Concept Design
- Schematic Design
- Detailed Design

Post-contract construction stages:

- Tender
- ff&E Procurement
- Project Supervision



BARCELONA, SPAIN

GRAFFITI IS AN ART OR A VANDALISM?

Although graffiti is generally considered to be a contemporary artform, it actually originated thousands of years ago. The earliest examples are things like cave paintings and inscriptions on ancient buildings in Egypt, Greece and the Roman Empire, with the word 'graffiti' itself stemming from the Italian word graffiato, meaning 'scratched'. Yet as the art form has evolved, so have the connotations surrounding it, and at present, turning walls into canvases remains nothing more than vandalism according to US law.



BANKSY POT TALBOT



GIRL AND SOLDIER

Art ceases to be art without freedom of expression, and perhaps graffiti exercises this right more than any other medium. Taking creativity to the streets means that the artists don't need to worry about gallery curators, critics or potential buyers, and can therefore be completely unrestrained, and even anonymous if they so choose. Status doesn't matter, and the lack of limitations allow graffiti artists to break conventions and push boundaries to create even more exciting — and arguably more authentic — works of art.



PALESTINE



"BANKSY" HOW AN ANONYMOUS ARTIST TOUCHES THE WORLD'S HEART?

GIRL WITH BALLOON

Banksy is one of the few living artists who can truly be called a household name. His satirical, politically-charged graffiti can be found everywhere from New York City to the Gaza Strip, and his immediately recognizable works such as Girl With Balloon have earned him a loyal worldwide cult following. Yet, despite his fame, Banksy's identity is still a complete mystery.

People have been speculating over who he could be for years, but none of these theories have ever been proven. And despite this anonymity, the verified works attributed to him continue to sell for huge sums of money. Which begs the question — if no one knows his real identity, how does Banksy actually make money?



NO BALL GAMES



BARCODE



NOLA (GREY RAIN)

HOW HAS BANKSY CONCEALED HIS IDENTITY FOR SO LONG?

Banksy kicked off his career in the 1990s, and has managed to keep his identity under wraps in the decades since. His signature stencil style has been key in allowing him to preserve his anonymity, as he can complete his work much more quickly by following this method compared to painting freehand.



TROLLEY HUNTERS (B&W)

Bleu Vert
New Capital, Egypt
بلو فير
العاصمة الجديدة، مصر

MEDAD'S VISION:

It's all about the people..

People are at the heart of what we do. Our culture is open and collaborative, and working in dynamic teams we inspire and challenge each other to achieve pioneering outcomes and service excellence for our clients. Our designers are committed to perform effectively in order to provide our clients with the ultimate in well-conceived, innovative design solutions.

We foster a highly creative, collaborative work environment at our office and constantly infuse our various teams with developing young design talent. Our creative staff is comprised of exceptionally talented design professionals who have embraced Medad's philosophy of design.



3D PRINTING IN BUILT

By 2025, Dubai plans for a fourth of its buildings to be printed in 3D construction methods, demonstrating the potential of a fast-growing technology capable of redefining and pushing the limits of traditional architecture. As the technique emerges as a viable solution in the construction, engineering, and architecture areas, its popularity is quickly increasing. In fact, just between 2021 and 2028, the global 3D construction market is expected to grow by 91%.⁽¹⁾ Why this rapid growth? Besides being a faster alternative and having lower construction costs, it can also provide affordable housing solutions and allow countless design possibilities,



among many other benefits. Thus, as architects must adapt to a new technological era, where speed and efficiency have become key factors in design and execution processes, the rise of 3D printing shows enormous promise. It could even help reshape construction as we know it.



Design flexibility and reduced construction time
3D construction printing is a new technology that shapes concrete without the use of formwork, meaning prefabricated parts and entire walls can be printed in any form in a time and cost-effective manner. Essentially, three-dimensional shapes are created through a computer-controlled process, transforming the traditional building process and allowing a variety of design opportunities. In contrast to other conventional methods, architects can easily develop individual structures with unprecedented surfaces, shapes, and colors for creative, innovative

and eye-catching buildings – the first and only of their kind. Practically any organic shape is possible: curved or straight walls, smooth or rough surfaces, flat or angled. There are truly no limits for expressing architectural creativity.



(1) according to a July 2021 report by Grand View Research.

Eterna HealthCare
Fifth Settlement, Egypt
إتيرنا للرعاية الصحية
التجمع الخامس، مصر

OUR SERVICES:

Medad is a full-service interior design firm known for its luxury, sophistication, and comfort in the world of architecture and interior design. Our skilled design team specializes in creating unique spaces. We do not have a predetermined style. Our goal is to create beautiful custom design that fulfils our client's needs and reflect their unique personality.

Services:

- Architecture
- Interior Design
- ff&E Procurement
- Urban Design
- Project Supervision

WINDOW-TO-WALL RATIO

Intention & measurement

Intention:

The sun is a powerful light source but is also a source of significant heat gain. Therefore, it is important to balance lighting and ventilation benefits of glazing with the impacts of heat gain on cooling needs and/or passive heating. Finding the correct balance between the transparent (glass) and the opaque surfaces in the

external façades helps to maximize daylight while minimizing unwanted heat transfer, resulting in reduced energy consumption.

The design goal should be to meet minimum illumination levels without significantly

exceeding the solar heat gains in temperate and warm climates, as well as to make the most of passive heating

in cold climates in winter time.

Windows generally transmit heat into the building at a higher rate than walls do. In fact, windows are usually

the weakest link in the building envelope as glass has much lower resistance to heat flow than other building

materials. Heat flows out through a glazed window more than 10 times faster than it does through a well insulated wall. While glazed areas are desirable to admit solar radiation in cold climates during the day,

windows in warmer climates can significantly increase the building's cooling loads.

eros et

Measurement:

This measure uses the Window to Wall Ratio (WWR), which is defined as the ratio of the total area of the window or other glazing area (including mullions and frames) divided by the gross exterior wall area.

The WWR is calculated with the following equation:

$$\text{WWR (\%)} = \frac{\sum \text{Glazing area (m}^2\text{)}}{\sum \text{Gross exterior wall area (m}^2\text{)}}$$

Glazing area is the area of glass on all façades regardless of orientation. Gross exterior wall area is the sum of the area of the exterior façades in all orientations, which includes walls, windows and doors. To calculate the exterior wall area, the interior surface of the exterior wall must be used to determine the lengths.

Strategy:

A building with a higher WWR will transfer more heat than a building with a lesser WWR. If the WWR is higher

than the default value (determined by climate for each project area), then other measures such as shading or a lower solar heat gain coefficient (SHGC) of the

glass should be considered to offset the energy loss. In cold climates, when the WWR is higher than the default, the insulation of glass using double or triple glazing should be considered.

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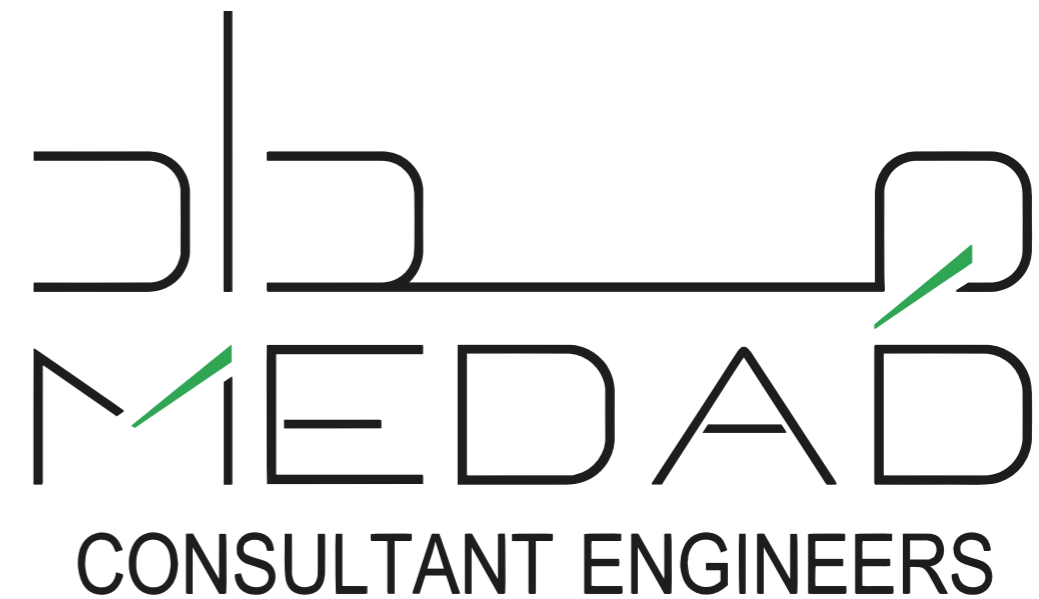
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